

**METHODS AND APPARATUS FOR GENERATING A DATA
CLASSIFICATION MODEL USING AN ADAPTIVE LEARNING ALGORITHM**

Abstract of the Disclosure

5 A data classification method and apparatus are disclosed for labeling
unknown objects. The disclosed data classification system employs a learning algorithm
that adapts through experience. The present invention classifies objects in domain
datasets using data classification models having a corresponding bias and evaluates the
performance of the data classification. The performance values for each domain dataset
10 and corresponding model bias are processed to identify or modify one or more rules of
experience. The rules of experience are subsequently used to generate a model for data
classification. Each rule of experience specifies one or more characteristics for a domain
dataset and a corresponding bias that should be utilized for a data classification model if
the rule is satisfied. The present invention dynamically modifies the assumptions (bias)
15 of the learning algorithm to improve the assumptions embodied in the generated models
and thereby improve the quality of the data classification and regression systems that
employ such models. The disclosed self-adaptive learning process will become
increasingly more accurate as the rules of experience are accumulated over time.

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